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## NOTICE OF ALLOWANCE AND FEE(S) DUE

28112

7590

01/31/2005

GEORGE O. SAILE & ASSOCIATES 28 DAVIS AVENUE POUGHKEEPSIE, NY 12603 EXAMINER

PAPER NUMBER

NGUYEN, CAM N

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ART UNIT

DATE MAILED: 01/31/2005

ſ	APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
١	10/062,314	02/01/2002	Syun-Ming Jang	TS97-306	3998

TITLE OF INVENTION: HARD MASKING METHOD FOR FORMING PATTERNED OXYGEN CONTAINING PLASMA ETCHABLE LAYER

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1400	\$0	\$1400	05/02/2005

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. <u>PROSECUTION ON THE MERITS IS CLOSED</u>. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

#### **HOW TO REPLY TO THIS NOTICE:**

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

- A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.
- B. If the status above is to be removed, check box 5b on Part B Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

- A. Pay TOTAL FEE(S) DUE shown above, or
- B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.
- II. PART B FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.
- III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.



#### PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail

Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

(703) 746-4000 or <u>Fax</u>

INSTRUCTIONS: This for appropriate. All further cor indicated unless corrected to maintenance fee notification	m should be used for tran respondence including the loelow or directed otherwise is.	smitting the ISSU Patent, advance on in Block 1, by (a	ders and notice of the specifying a	PUBLICATION FEE (if requirements of maintenance fees to a new correspondence address	ired). Blocks I through 5 s will be mailed to the current ; and/or (b) indicating a sep	chould be completed where correspondence address as arate "FEE ADDRESS" for	
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	90 01/31/2005			have its own certificat	e of mailing or transmission.	J.	
GEORGE O. SAI 28 DAVIS AVENU POUGHKEEPSIE,		S		Ce I hereby certify that the States Postal Service addressed to the Matransmitted to the USI	Certificate of Mailing or Transmission this Fee(s) Transmittal is being deposited with the Unite e with sufficient postage for first class mail in an envelor fail Stop ISSUE FEE address above, or being facsimil SPTO (703) 746-4000, on the date indicated below.		
						(Depositor's name)	
						(Signature)	
						(Date)	
APPLICATION NO.	FILING DATE		FIRST NAMEI	O INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
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nonprovisional	NO	\$1400	)	\$0	\$1400	05/02/2005	
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CFR 1.363).  Change of correspond Address form PTO/SB/13	lence address (or Change of 22) attached.	Согтеѕропдепсе		mes of up to 3 registered pate OR, alternatively,		· •	
"Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.			(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.				
3. ASSIGNEE NAME AND	RESIDENCE DATA TO B	E PRINTED ON T	THE PATENT	Γ (print or type)	·		
PLEASE NOTE: Unless recordation as set forth in	an assignee is identified be 37 CFR 3.11. Completion	elow, no assignee of this form is NO	data will app T a substitute	ear on the patent. If an assig for filing an assignment.	nee is identified below, the	document has been filed fo	
(A) NAME OF ASSIGN	EE	(B	B) RESIDENC	CE: (CITY and STATE OR CO	UNTRY)		
Please check the appropriate	e assignee category or catego	ries (will not be pr	inted on the p	natent): 🗖 Individual 🗖 O	Corporation or other private gr	roup entity Governmen	
4a. The following fee(s) are	enclosed:	46	. Payment of	<u>-</u>			
☐ Issue Fee				in the amount of the fee(s) is e			
	mall entity discount permitte	ed)	Payment	by credit card. Form PTO-203	8 is attached.		
Advance Order - # of	Copies	<del></del>	The Dire	ector is hereby authorized by count Number	charge the required fee(s), or (enclose an extra c	credit any overpayment, to	
5. Change in Entity Status  a. Applicant claims S	(from status indicated above MALL ENTITY status. See	•	☐ b. Applic	ant is no longer claiming SMA	ALL ENTITY status. See 37 C	CFR 1.27(g)(2).	
The Director of the USPTO NOTE: The Issue Fee and P interest as shown by the reco	is requested to apply the Issuublication Fee (if required) vords of the United States Pate	ue Fee and Publica will not be accepted ent and Trademark	tion Fee (if and d from anyone Office.	ny) or to re-apply any previous e other than the applicant; a reg	ly paid issue fee to the applic sistered attorney or agent; or t	ation identified above. he assignee or other party in	

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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Authorized Signature

Typed or printed name

Date \_

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			NGUYEN, CAM N		
28 DAVIS AVEN POUGHKEEPSI			ART UNIT	PAPER NUMBER	
			1754		

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### Determination of Patent Term Extension or Adjustment under 35 U.S.C. 154 (b)

A reissue patent is for "the unexpired part of the term of the original patent." See 35 U.S.C. 251. Accordingly, the above-identified reissue application is not eligible for Patent Term Extension or Adjustment under 35 U.S.C. 154(b).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571) 272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

# Notice of Allowability

Application No. 10/062,314

Applicant(s)

Jang et al.

Examiner

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

Cam Nguyen

Art Unit 1754

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course.  THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.
1. X This communication is responsive to an amendment/response filed on 9/4/03
2. X The allowed claim(s) is/are 1-28
3. X The drawings filed on Feb 1, 2002 are accepted by the Examiner.
4. Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
a) All b) Some* c) None of the:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No
Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).  *Certified copies not received:
5. Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
(a) The translation of the foreign language provisional application has been received.
6. Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. <b>THIS THREE-MONTH PERIOD IS NOT EXTENDABLE</b> .
7. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8.  CORRECTED DRAWINGS must be submitted.
(a) 🗌 including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
1) $\square$ hereto or 2) $\square$ to Paper No
(b) including changes required by the proposed drawing correction filed, which has been approved by the examiner.
(c) including changes required by the attached Examiner's Amendment/Comment or in the Office action of Paper No
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the top margin (not the back) or each sheet. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson.
9. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.
Attachment(s)
1 Notice of References Cited (PTO-892)  2 Notice of Informal Patent Application (PTO-152)
3 Notice of Draftsperson's Patent Drawing Review (PTO-948) 4 Interview Summary (PTO-413), Paper No
5 Information Disclosure Statement(s) (PTO-1449), Paper No(s) 6 I Examiner's Amendment/Comment
7 Lexaminer's Comment Regarding Requirement for Deposit of Biological 8 Keaminer's Statement of Reasons for Allowance Material
9 Dother Campbugen

Application/Control Number: 10/062,314

Art Unit: 1754

Reasons for Allowance

Page 2

1. The following is an examiner's statement of reasons for allowance:

While methods of forming patterned microelectronics layers within microelectronics fabrication and microelectronics fabrication are known, the particular method that uses plasma etching method employing the patterned hard mark layer as an etch stop layer as specified in claims 1 and 9 distinguishes over the prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

2. Claims 1-28 were pending in the application. Claims 1-28 are now allowed.

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Cam Nguyen, whose telephone number is (703) 305-3923. The examiner can normally be reached on M-F from 9:30 am. to 6:00 pm.

Nguyen/cnn CM

June 1, 2004

Cam Nguye

Primary Examiner

Art Unit: 1754